BASIS OF BEARINGS: THE NORTH LINE OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 36, TOWNSHIP 11 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, BEING MONUMENTED AT THE WEST END BY A 1" YELLOW PLASTIC CAP STAMPED "18235" AND THE EAST END BY A 2" ALUMINUM CAP STAMPED "32439" WITH APPROPRIATE MARKINGS, IS ASSUMED TO BEAR N89°03'58"E A DISTANCE OF 1,332.09 FEET.

PARCEL 1:

COMMENCING AT THE NORTHWEST CORNER OF SECTION 31, TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN. SAID POINT BEING THE POINT OF BEGINNING: THENCE N89°06'20"E ON THE NORTH OF LINE OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 31 A DISTANCE OF 1.474.13 FEET TO THE WEST SIXTEENTH CORNER OF SAID SECTION 31; THENCE N00°08'36"E ON THE WEST LINE OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 30, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, A DISTANCE OF 1325.48 FEET TO THE SOUTHWEST SIXTEENTH CORNER OF SAID SECTION 30; THENCE N89°03'20"E ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 30,, A DISTANCE OF 920.27 FEET; THENCE N00°08'15"E A DISTANCE OF 128.29 FEET; THENCE S55°57'42"E A DISTANCE OF 423.40 FEET; THENCE S13°57'08"E A DISTANCE OF 628.43 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF OLD STAGECOACH ROAD AS PLATTED IN FLYING HORSE NORTH FILING NO.1, RECORDED UNDER RECEPTION NUMBER 218714238; THENCE ON SAID NORTHERLY RIGHT-OF-WAY LINE THE FOLLOWING SIX (6) COURSES:

- 1. S52°41'25"W A DISTANCE OF 1,517.83 FEET TO A POINT OF CURVE:
- 2. ON THE ARC OF A CURVE TO THE RIGHT HAVING A DELTA OF 52°50'29", A RADIUS OF 760.00 FEET A DISTANCE OF 700.92 FEET TO A POINT OF TANGENT;
- 3. N74°28'06"W A DISTANCE OF 169.05 FEET TO A POINT OF CURVE;
- 4. ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 32°53'45", A RADIUS OF 1,640.00 FEET. A DISTANCE OF 941.59 FEET TO A POINT OF TANGENT;
- 5. S72°38'09"W A DISTANCE OF 400.46 FEET TO A POINT OF CURVE;
- 6. ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 00°45'53", A RADIUS OF 3,460.00 FEET A DISTANCE OF 46.18 FEET TO A POINT ON CURVE, SAID POINT BEING THE SOUTHEAST CORNER OF LOT 28 OF SAID FLYING HORSE NORTH FILING NO. 1;

THENCE N00°13'46"W ON THE EAST LINE OF SAID LOT 28, A DISTANCE OF 497.29 FEET TO A POINT ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 36, TOWNSHIP 11 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN: THENCE N89°03'58"E ON SAID NORTH LINE A DISTANCE OF 491.20 FEET TO THE POINT OF

CONTAINING A CALCULATED AREA OF 2,475,776 SQUARE FEET OR 56.836 ACRES, MORE OR LESS.

PARCEL 2:

COMMENCING AT THE SOUTHEAST CORNER OF LOT 80, FLYING HORSE NORTH FILING NO.1, RECORDED UNDER RECEPTION NUMBER 218714238, SAID POINT BEING ON THE WESTERLY LINE OF LOT 79, FLYING HORSE NORTH FILING NO. 1, SAID POINT BEING THE POINT OF BEGINNING; THENCE S00°00'00"E ON THE WEST LINE OF SAID LOT 79, A DISTANCE OF 477.97 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 30, TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN.

THENCE S89°04'37"W, ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 30, A DISTANCE OF 144.30 FEET TO THE EAST SIXTEENTH CORNER OF SECTION 31; THENCE S00°00'11"E, ON THE EAST LINE OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 31, A DISTANCE OF 1,326.67 FEET TO THE NORTHEAST SIXTEENTH CORNER OF SAID SECTION 31; THENCE N89°08'21"E, ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 31, A DISTANCE OF 1,289.57 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY LINE OF BLACK FOREST ROAD, SAID POINT BEING 30.00 FEET WEST OF AND PARALLEL TO THE EAST LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 31; THENCE S00°00'54"W, ON THE WESTERLY RIGHT OF WAY LINE OF SAID BLACK FOREST ROAD BEING ALSO 30.00 FEET WEST OF AND PARALLEL TO THE EAST LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 31, A DISTANCE OF 1,328.09 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 31; THENCE S89°11'15"W, ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 31, A DISTANCE OF 2,327.40 FEET; THENCE N07°08'46"E A DISTANCE OF 860.74 FEET: THENCE N04°05'31"W A DISTANCE OF 1.388.17 FEET: THENCE N09°22'22"W A DISTANCE OF 488.58 FEET; THENCE N37°18'35"W A DISTANCE OF 402.75 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF OLD STAGECOACH ROAD AS PLATTED IN FLYING HORSE NORTH FILING NO.1, RECORDED UNDER RECEPTION NUMBER 218714238; THENCE ON THE BOUNDARY OF SAID FLYING HORSE NORTH FILING NO.1 THE FOLLOWING EIGHT (8) COURSES:

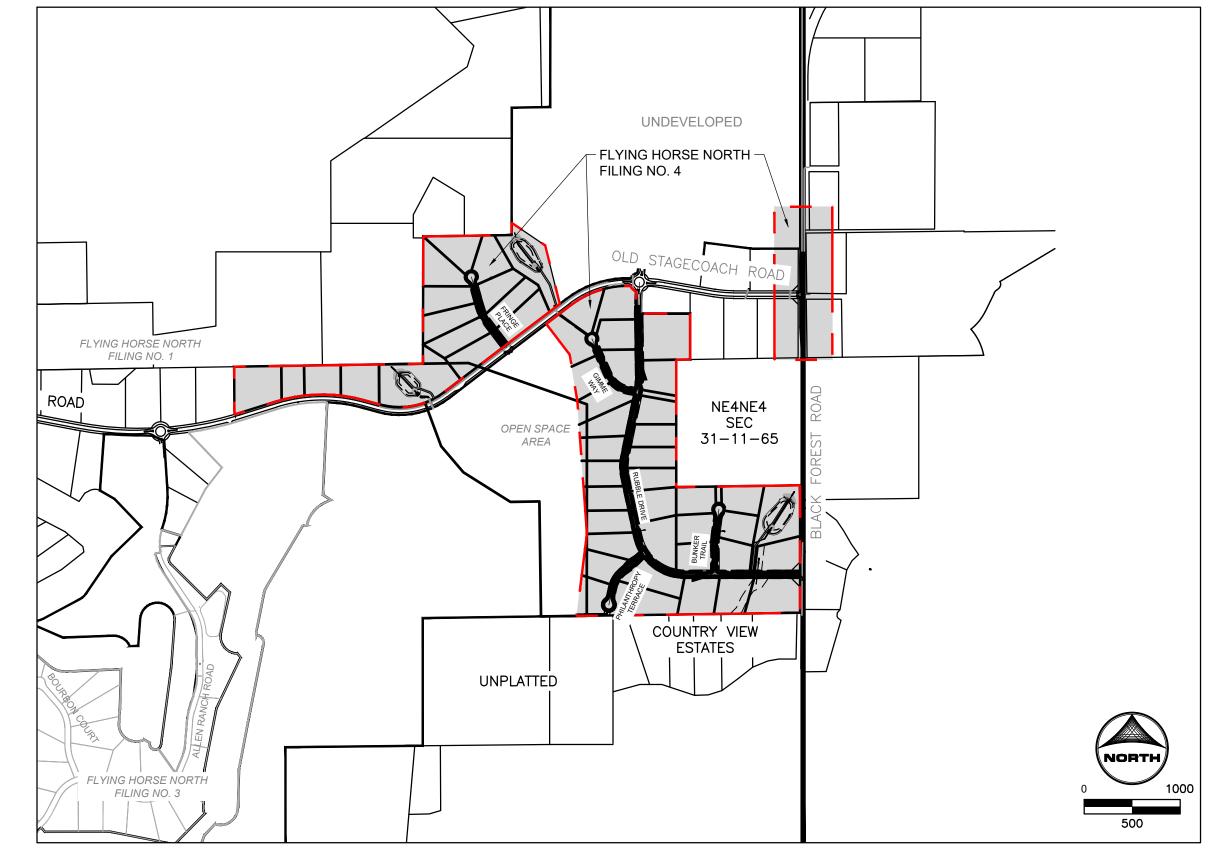
- 1. N52°41'25"E A DISTANCE OF 330.02 FEET TO A POINT OF CURVE:
- 2. ON THE ARC OF A CURVE TO THE RIGHT HAVING A DELTA OF 38°46'50", A RADIUS OF 960.00 FEET A DISTANCE OF 649.77 FEET TO A POINT OF TANGENT;
- 3. S88°31'45"E A DISTANCE OF 8.27 FEET TO A POINT ON CURVE;
- 4. ON THE ARC OF A CURVE TO THE LEFT WHOSE CENTER BEARS N67°53'33"E, HAVING A DELTA OF 48°57'51", A RADIUS OF 100.00 FEET A DISTANCE OF 85.46 FEET TO A POINT ON CURVE;
- 5. S01°28'15"W A DISTANCE OF 152.16 FEET TO A POINT OF CURVE; 6. ON THE ARC OF A CURVE TO THE LEFT HAVING A DELTA OF 00°53'47", A RADIUS OF 5,030.00 FEET A DISTANCE OF 78.69 FEET TO A POINT ON CURVE;
- 7. S89°25'32"E A DISTANCE OF 60.00 FEET; 8. N89°59'56"E A DISTANCE OF 505.80 FEET TO THE POINT OF BEGINNING.

CONTAINING A CALCULATED AREA OF 5,181,149 SQUARE FEET OR 119.943 ACRES, MORE OR LESS.

PARCEL 1 AND PARCEL 2 CONTAIN A TOTAL CALCULATED AREA OF 7,656,925 SQUARE FEET OR 175.779 ACRES.

FLYING HORSE NORTH FILING NO. 4 GRADING AND EROSION CONTROL PLANS

A TRACT OF LAND BEING A PORTION OF SECTION 30, TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE 6TH P.M., AND A PORTION OF SECTION 31, TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE 6TH P.M., CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO



VICINITY MAP

NOT TO SCALE

SHEET INDEX

1 - COVER

- 2 LEGEND & NOTES 3 - 6 - INITIAL & INTERIM GEC
- 7 10 FINAL GEC
- 11 12 DETAILS 13 - CHANNEL SECTIONS

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/ OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/ OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JOSHUA PALMER P.E. **COUNTY ENGINEER**

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

DESIGN ENGINEER'S STATEMENT

10|31|2024 RICHARD D. LYON, COLORADO P.E. NO. 53921 DATE

Revise to match GEC Checklist Item "hh"

Revise to match GEC

Checklist Item "ff"

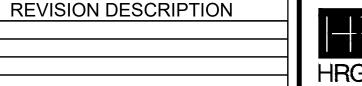
OWNER/DEVELOPER'S STATEMENT: THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN AND ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

DREW BALSICK, PRI #2 LLC. VICE PRESIDENT

SHEET

PCD FILE NO.: SF24

BAR IS ONE INCH ON DRAWN BY: AMC JOB DATE: 10/31/2024 OFFICIAL DRAWINGS. APPROVED: RDL JOB NUMBER: <u>211030.240</u> IF NOT ONE INCH. CAD DATE: <u>10/31/2024</u> ADJUST SCALE ACCORDINGLY CAD FILE: J:\2021\211030\CAD\Dwgs\C\Filing_No_4\GEC\GEC-Cover



NO. DATE BY

HRGreen FAX: 713.965.0044

HR GREEN - COLORADO SPRINGS 1975 RESEARCH PARKWAY SUITE 160 COLORADO SPRINGS, CO 80920 PHONE: 719.300.4140

FLYING HORSE NORTH FILING 4 PRI #2, LLC. EL PASO COUNTY, CO

GRADING AND EROSION CONTROL NOTES:

- STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
- NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE, AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCITING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OF CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND THE EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
- CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
- ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATION CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
- TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS
 - FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND
- EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE. ALL PERMANENT STORMWATER FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OF FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES HALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
- COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OF WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL ARES DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S)
- 12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
- CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
- 14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
- EROSION BLANKET OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL
- IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED OR DISCHARGED AT THIS SITE. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY OR OTHER PUBLIC WAY,
- UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE
- CLEANED UP PROPERLY AND PROPERLY DISPOSED OF IMMEDIATELY. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION, DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF THE SITE DEVELOPMENT
- 20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN AN EAT. ORDERLY MANNER. IN THEIR ORIGINAL CONTAINERS. WITH ORIGINAL MANUFACTURER'S LABEL.
- NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S) SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED
- 22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRED ADEQUATE SECONDARY PROTECTION TO CONTAIN AL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS) AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS RULES OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES OR REGULATIONS SHALL APPLY.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES. 27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- 28. THE SOILS REPORT FOR THE SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INC. DATED SEPTEMBER 11, 2024 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- AT LEAST (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP) OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION WQCD - PERMITS 4300 CHERR CREEK DRIVE SOUTH DENVER, CO 80246-1530 ATTN: PERMITS UNIT

FROUDE NUMBER CALCULATIONS: 100-YR						
SECTION	VELOCITY	GRAVITATIONAL CONSTANT	HYDRAULIC DEPTH	XSECTIONAL AREA	TOP WIDTH	FROUDE #
	FT/S	FT/S^2	FT	FT^2	FT	N/A
A-A	5.79	32.17	0.88	47.30	53.49	1.09
B-B	3.92	32.17	0.55	18.30	33.21	0.93
C-C	3.33	32.17	0.31	12.60	41.27	1.06
D-D	3.91	32.17	0.55	48.50	88.91	0.93
E-E	4.44	32.17	0.20	1.10	5.41	1.74
F-F	7.56	32.17	1.34	39.40	29.43	1.15
G-G	6.86	32.17	0.44	3.10	7.00	1.82
H-H	7.75	32.17	1.51	36.60	24.18	1.11
I-I	8.90	32.17	0.76	10.50	13.74	1.79

	SHEAR STRESS	CALCULATIO	NS: 100-`	YR
SECTION	UNIT WEIGHT OF WATER	DEPTH OF FLOW	SLOPE	SHEAR STRESS
	LB/FT^3	FT	FT/FT	LB/FT^2
A-A	62.43	1.10	0.022	1.51
В-В	62.43	0.70	0.019	0.83
C-C	62.43	0.60	0.030	1.12
D-D	62.43	0.80	0.019	0.95
E-E	62.43	0.40	0.090	2.25
F-F	62.43	2.70	0.022	3.71
G-G	62.43	0.90	0.082	4.61
H-H	62.43	3.00	0.020	3.75
I-I	62.43	1.50	0.065	6.09
		<u> </u>		

CHANNEL LINING DETERMINATION					
CALCULATED VALUES		P300 MAX VALUES			
SECTION	SHEAR STRESS	VELOCITY	SHEAR STRESS	VELOCITY	LINING REQUIRED
A-A	1.51	5.79	3.00	9.00	P300
B-B	0.83	3.92	3.00	9.00	P300
C-C	1.12	3.33	3.00	9.00	P300
D-D	0.95	3.91	3.00	9.00	P300
E-E	2.25	4.44	3.00	9.00	P300
F-F	3.71	7.56	3.00	9.00	TMAX
G-G	4.61	6.86	3.00	9.00	TMAX
H-H	3.75	7.75	3.00	9.00	TMAX
I-I	6.09	8.90	3.00	9.00	TMAX

ABBREVIATIONS

			FOC	FIBER OPTICS CABLE
	Δ	DEFLECTION ANGLE	FT	FOOT OR FEET
	Ø, DIA	DIAMETER	GB	GRADE BREAK
	AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	GAL	GALLON
	ABC	ASPHALT BASE COURSE	HDPE	HIGH DENSITY POLYETHYLENE
	ABD	ABANDONED	HC RAMP	HANDICAP RAMP
	AC	ACRE	HW	HEADWALL
	ADA	THE AMERICANS WITH DISABILITIES ACT	INV	INVERT
	ASPH	ASPHALT		
	ASS'Y	ASSEMBLY	KM	KILOMETER
		AMERICAN SOCIETY FOR TESTING MATERIALS	L	LENGTH
	ASTM		LF	LINEAR FEET
	BFE	BASE FLOOD ELEVATION	M	METER
	BLDG	BUILDING	MIN	MINIMUM
	BLVD	BOULEVARD	MISC	MISCELLANEOUS
	BM	BENCH MARK	MAINT	MAINTENANCE
	BNDY	BOUNDARY	MAX	MAXIMUM
	BOP	BOTTOM OF POND	MH	MANHOLE
	BW	BOTTOM OF WALL	MP	MIDPOINT
	C&G	CURB AND GUTTER	N	NORTH/NORTHING
-	CA	COARSE AGGREGATE	NO	NUMBER
,	CATV	CABLE TELEVISION	OC	ON CENTER
F	СВ	CHORD BEARING/CATCH BASIN	OH	OVERHEAD
_	CFS	CUBIC FEET PER SECOND	PB	PUBLIC
	CIP	CAST IRON PIPE	PC	POINT OF CURVATURE
\exists	CL	CENTER LINE	PCC	POINT OF COMPOUND CURVATURE
9	CMP	CORRUGATED METAL PIPE	PCR	
3	COMP	COMPOSITE		POINT OF CURB RETURN
_	CONC	CONCRETE	PI	POINT OF INTERSECTION
6	CONST		PIE	PUBLIC IMPROVEMENT ESMT
3		CONSTRUCT OR CONSTRUCTION	PT	POINT OF TANGENCY
_	CSP	CORRUGATED STEEL PIPE	PRC	PROPOSED
4	CSU	COLORADO SPRINGS UTILITIES	PRC	POINT OF REVERSE CURVATURE
=	CT	COURT	PRV	PRESSURE REDUCING VALVE
	CTR	CENTER	PVT	PRIVATE
2	CU	COPPER	PUAE	PUBLIC UTILITY AND ACCESS ESMT
_	CY	CUBIC YARD	PUADE	PUBLIC UTILITY, ACCESS AND DRAINAGE ESMT
1	DBL	DOUBLE	PVC	POLYVINYL CHLORIDE
9	DEG	DEGREE	R	RADIUS
Ш	DET	DETAIL	REC	RECEPTION
	DEPT	DEPARTMENT	RCBC	REINFORCED CONCRETE BOX CULVERT
	DIM	DIMENSION	S	SOUTH
	DIP	DUCTILE IRON PIPE	SHT	SHEET
	DOT	DEPARTMENT OF TRANSPORTATION	SQ	SQUARE
	DWG	DRAWING	SW	SPILLWAY
	E	EAST/EASTING	TBC	TOP BACK OF CURB
	EL	ELEVATION	TC	TRICKLE CHANNEL
	ELEC	ELECTRIC	TOP	TOP OF POND
	EOG	EDGE OF GUTTER		
	EOP	EDGE OF PAVEMENT	TW	TOP OF WALL
	ESMT		TYP	TYPICAL
		EASEMENT	UG	UNDERGROUND
	EW	ENDWALL	VERT	VERTICAL
	EX	EXISTING	W	WEST
	FD	FRENCH DRAIN	WW	WASTEWATER
	FDC	FIRE DEPARTMENT CONNECTION	WWF	WELDED WIRE FABRIC
	FE	FLANGE ELEVATION	W/	WITH
	FES	FLARED END SECTION	W/O	WITHOUT
	FF	FINISHED FLOOR	YD	YARD
	FG	FINISHED GRADE		
	FH	FIRE HYDRANT		
	FHWA	FEDERAL HIGHWAY ADMINISTRATION		
	FL	FLOW LINE		

FIBER OPTICS CABLE

EXISTING

PROPOSED

MISCELLANEOUS

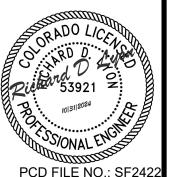
ACCESSIBLE PARKING

BOLLLARD

FVL

LEGEND

	EXISTING	PROPOSED	STORM SEWER
MATCH LINE			
FILING LINE			MANHOLE
SECTION LINE			STORM INLET
PROPERTY LINE			FLARED END SECTION
EASEMENT LINE			RIPRAP
RIGHT OF WAY			IM IVAI
CENTERLINE			SANITARY SEWER
CHAIN LINK FENCE			SANTANT SEWEN
WOODEN FENCE	— н — н — н — н	—— H —— H —— H	CLEAN OUT
ROD IRON FENCE			MANHOLE
GUARDRAIL			PLUG
CABLE TV	TV	TV	
U.G. ELECTRIC	— — — UE—	— — — UE—	
OVERHEAD ELECTRIC	OE	OE	WATER
FIBER OPTIC	— — FO—	— — — FO—	FIRE HYDRANT
GAS MAIN			FIRE DEPT. CONNECTION
SANITARY SEWER	— — — ss—	─←	GATE VALVE
STORM DRAIN			MANHOLE
TELEPHONE	UT	UT	METER
WATER MAIN	W	W	TEE
SWALE	•	. • • • • • • • •	REDUCER
TRAIL			
CURB & GUTTER			
DRAINAGE BASIN			
INDEX CONTOUR			
INTER. CONTOUR			DRY UTILITIES
100-YR FLOODPLAIN			
FLOODWAY			ELECTRIC METER
EDGE OF WETLANDS	r — — — — — ¬		ELECTRIC PEDESTAL
EDGE OF WETLANDS			ELECTRICAL CABINET
			ELECTRIC VAULT
DRAINAGE			FIBER OPTIC PULL BOX
	EXISTING	PROPOSED	FIBER OPTIC MANHOLE
DRAINAGE BASIN			FIBER OPTIC PEDESTAL
			FIBER OPTIC SIGN
		(I.D.)	FIBER OPTIC VAULT
BASIN TAG		\area/	GAS METER
			GAS SIGN
DESIGN POINT		\bigwedge	GAS VAULT
DESIGN FUINT			TELEPHONE CABINET
			TELEPHONE MANHOLE
			TELEPHONE SIGNAL/MAST
			TELEPHONE SIGN



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REVISION DESCRIPTION

NO. DATE BY

HR GREEN - COLORADO SPRINGS 1975 RESEARCH PARKWAY SUITE 160 COLORADO SPRINGS, CO 80920 PHONE: 719.300.4140 HRGreen FAX: 713.965.0044

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GRADIN & EROSION CONTROL PLAN

| LEGEND & NOTES

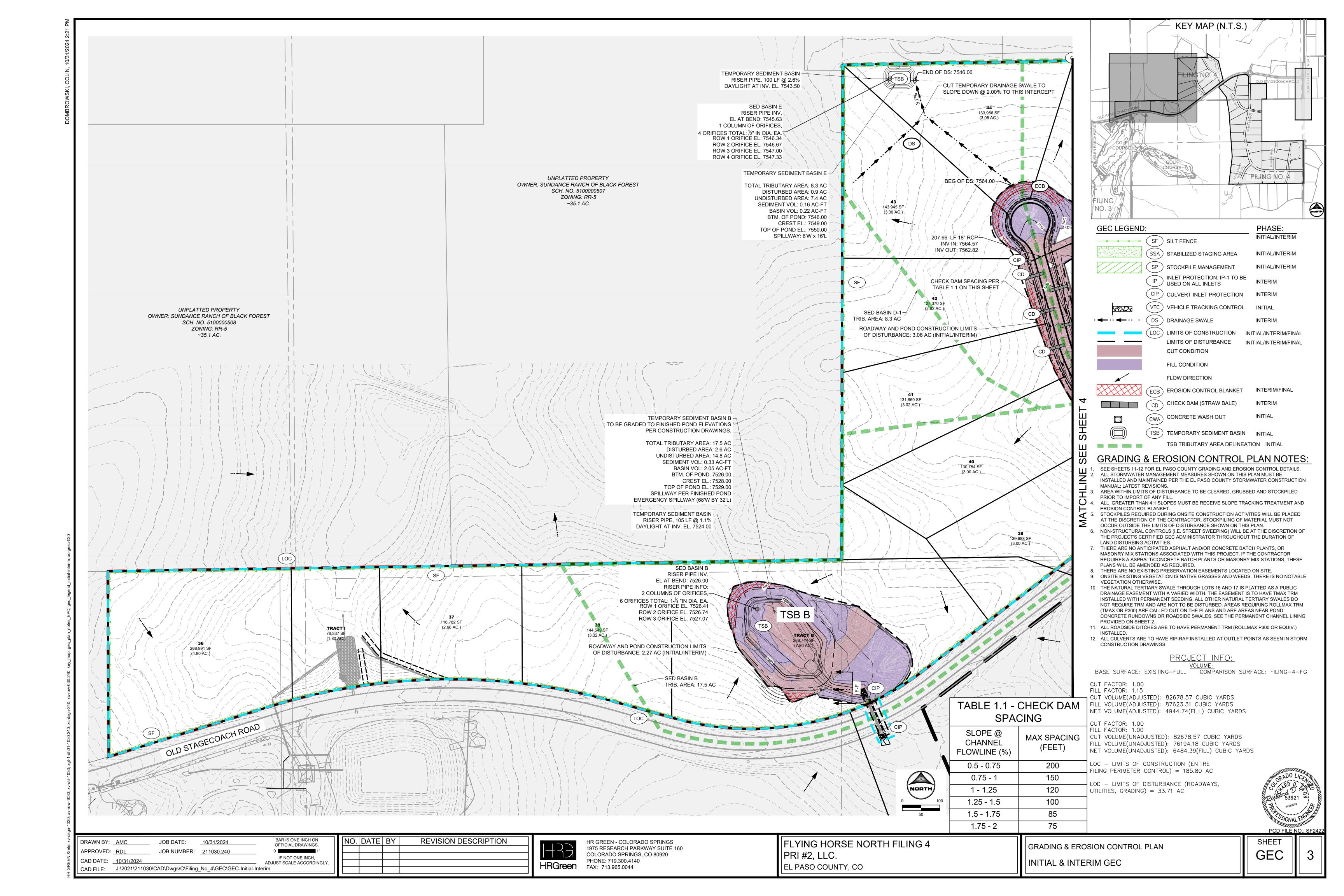
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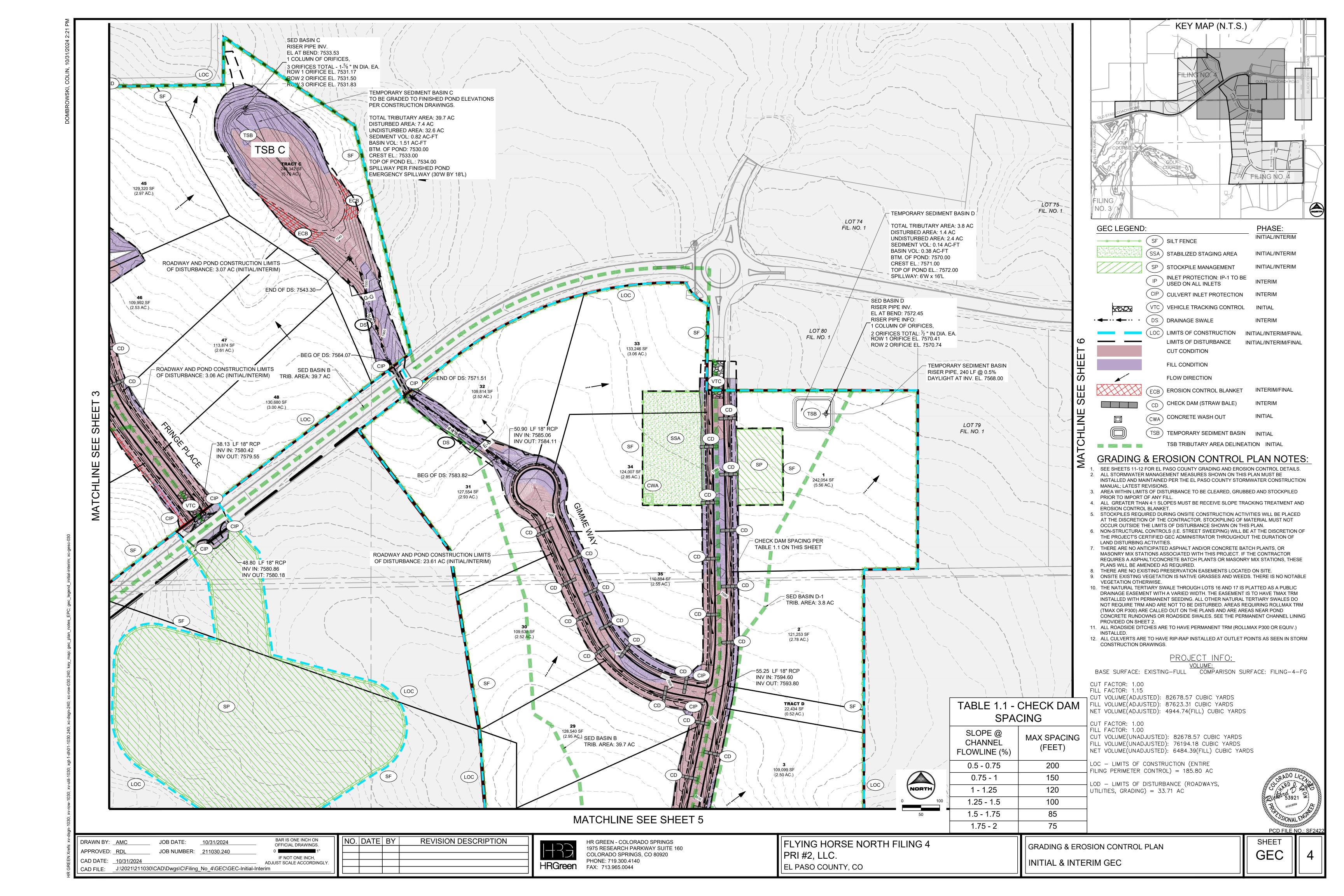
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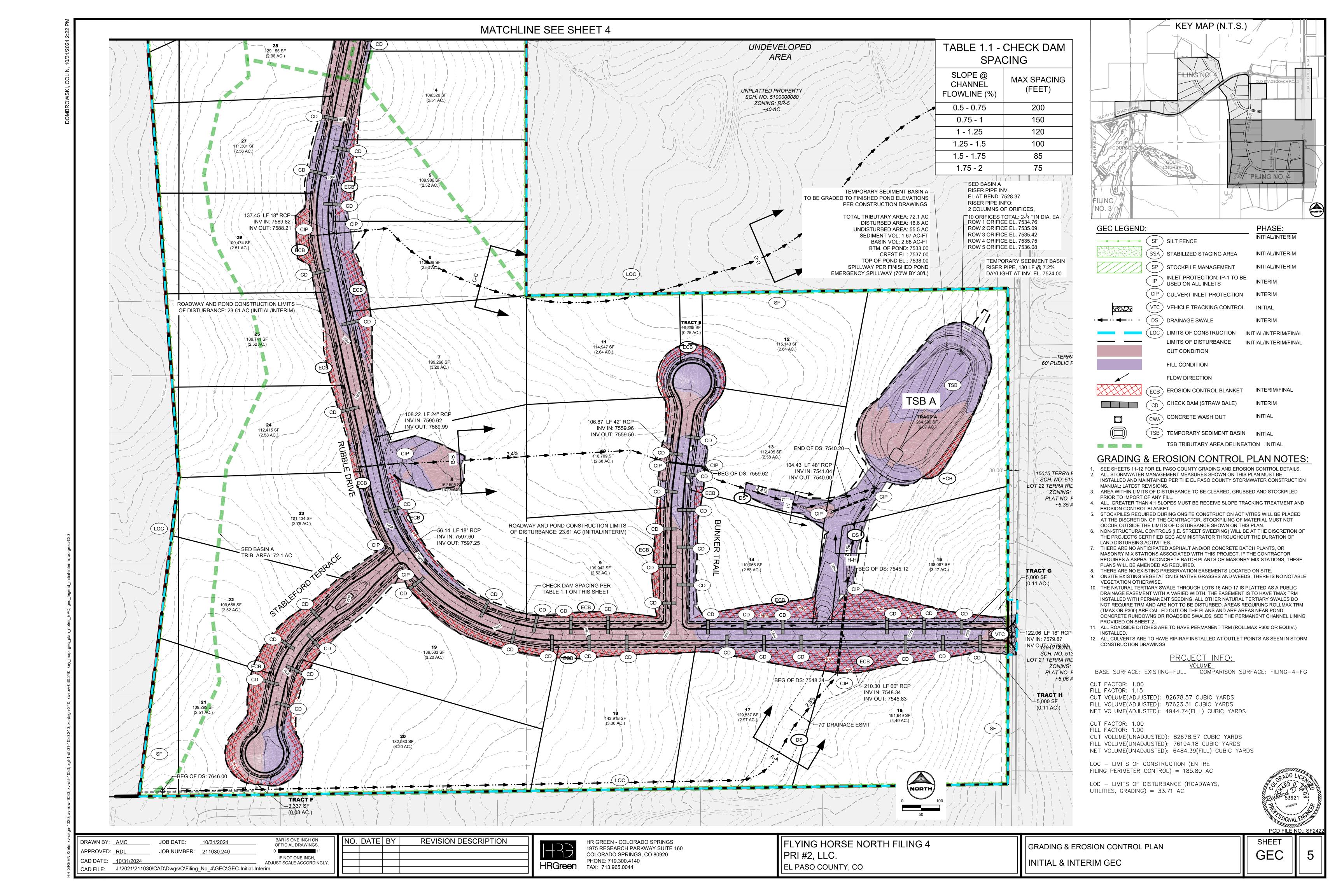
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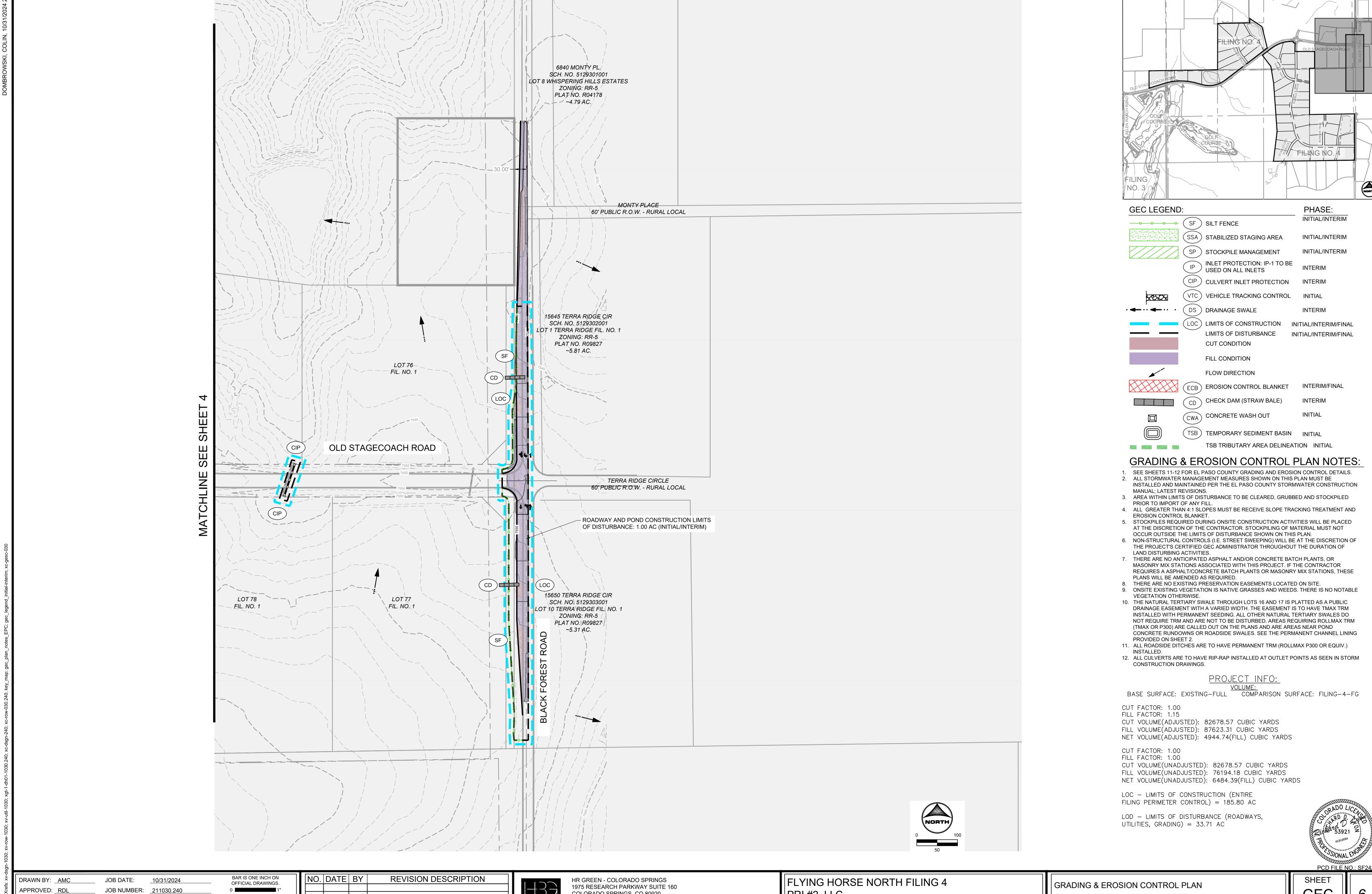
LIGHT POLE

SHEET









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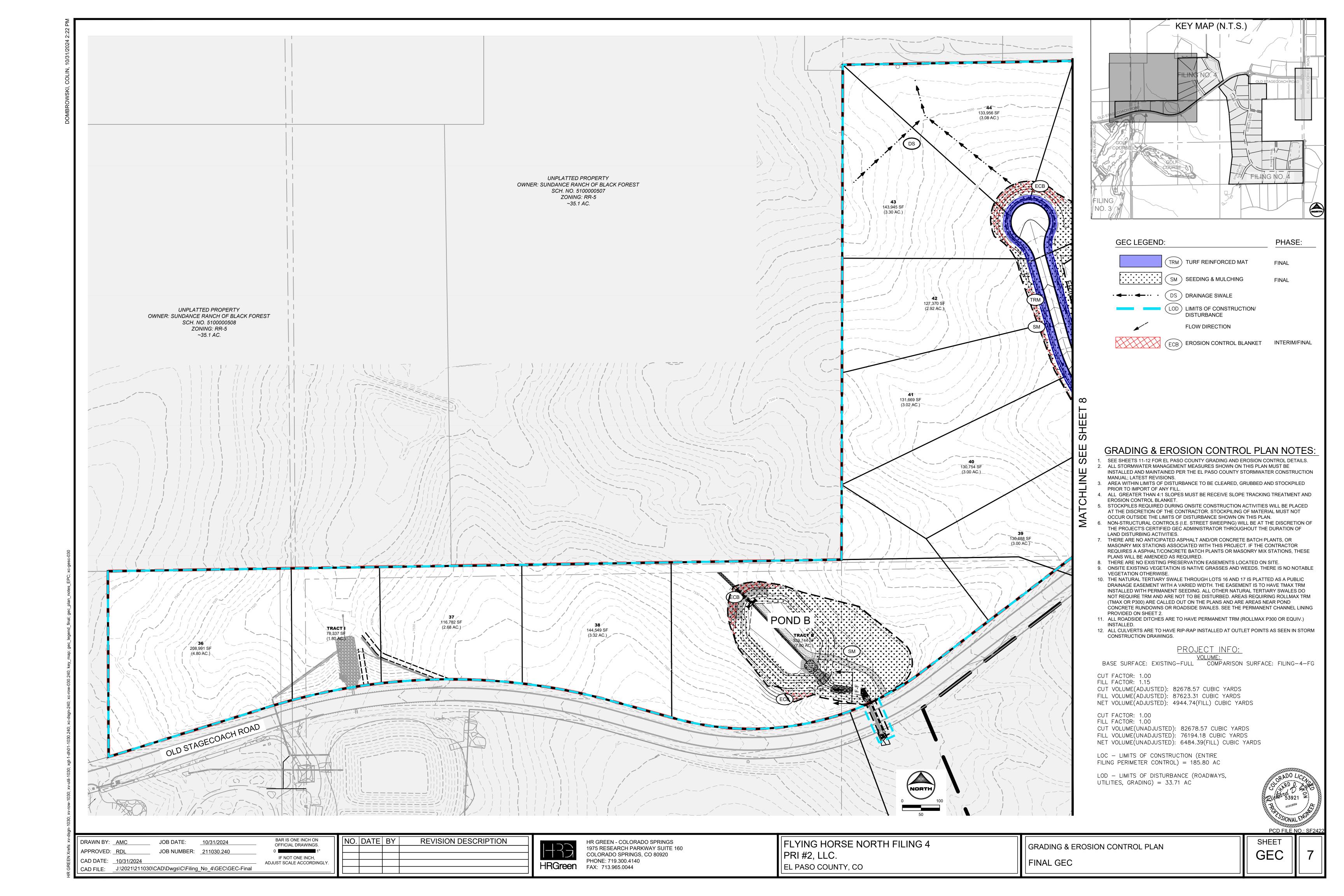
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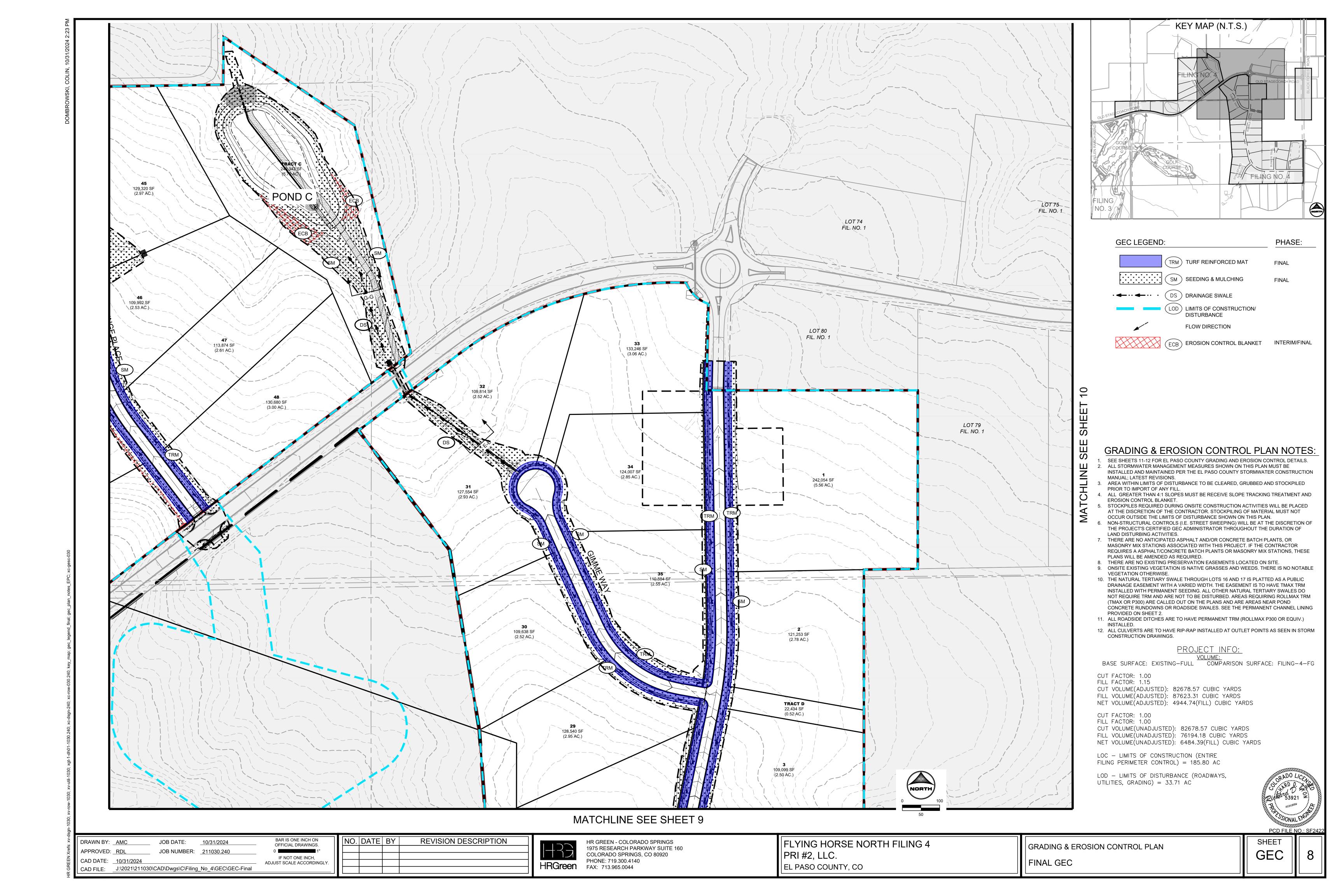
EL PASO COUNTY, CO

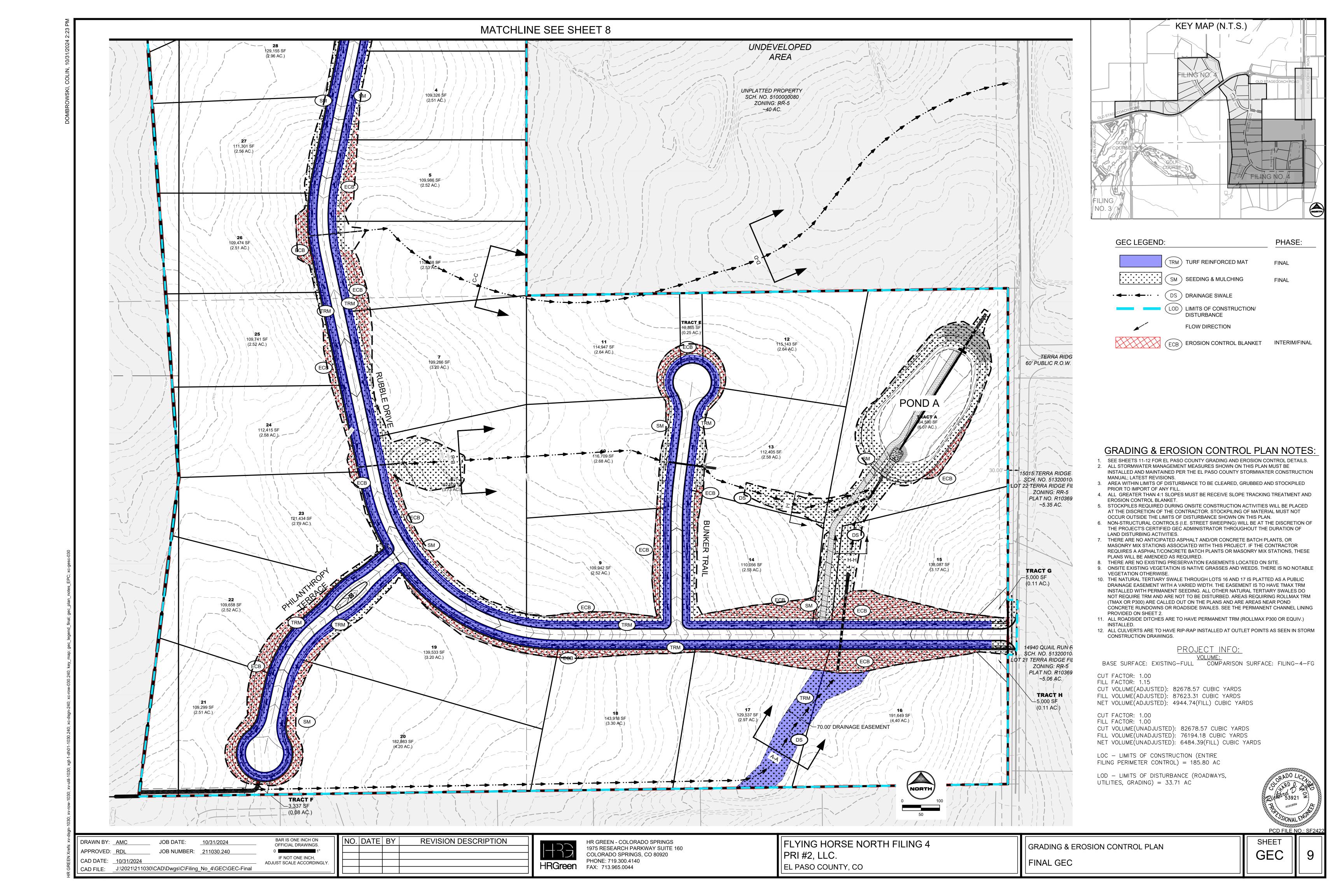
GEC

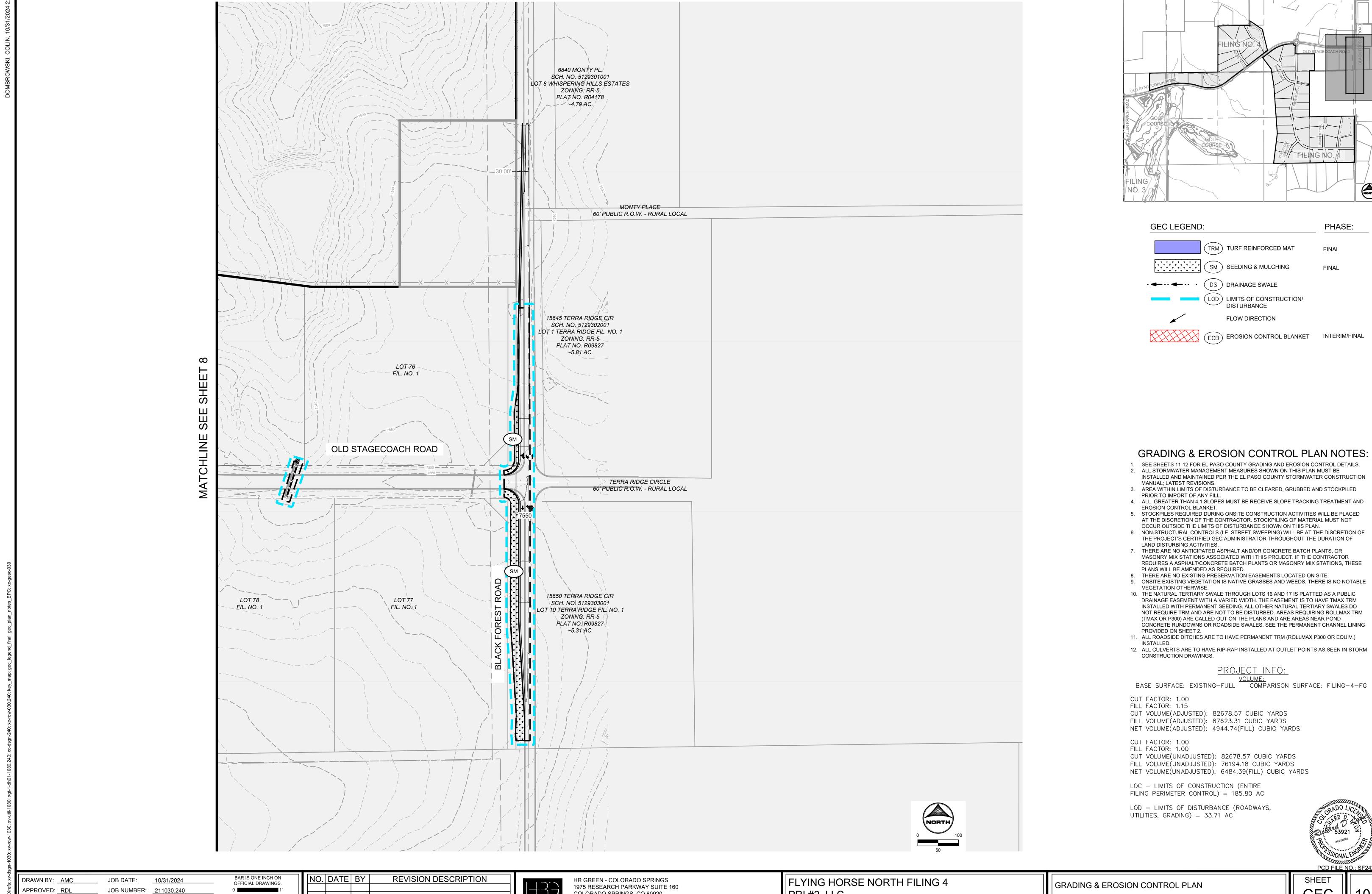
| INITIAL & INTERIM GEC

KEY MAP (N.T.S.)









COLORADO SPRINGS, CO 80920

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PRI #2, LLC.

EL PASO COUNTY, CO

GEC

FINAL GEC

KEY MAP (N.T.S.)

Mulching (MU)

EC-4

Description

Mulching consists of evenly applying straw, hay, shredded wood mulch, rock, bark or compost to disturbed soils and securing the mulch by crimping, tackifiers, netting or other measures. Mulching helps reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff. Although often applied in conjunction with temporary or permanent seeding, it can also be used for temporary stabilization of areas that cannot be reseeded due to seasonal constraints.

Photograph MU-1. An area that was recently seeded, mulched,

Appropriate Uses

Mulch can be applied either using

standard mechanical dry application

methods or using hydromulching equipment

that hydraulically applies a slurry of water,

wood fiber mulch, and often a tackifier.

Use mulch in conjunction with seeding to help protect the seedbed and stabilize the soil. Mulch can also be used as a temporary cover on low to mild slopes to help temporarily stabilize disturbed areas where growing season constraints prevent effective reseeding. Disturbed areas should be properly mulched and tacked, or seeded, mulched and tacked promptly after final grade is reached (typically within no longer than 14 days) on portions of the site not otherwise permanently stabilized.

Standard dry mulching is encouraged in most jurisdictions; however, hydromulching may not be allowed in certain jurisdictions or may not be allowed near waterways.

Do not apply mulch during windy conditions.

Design and Installation

Prior to mulching, surface-roughen areas by rolling with a crimping or punching type roller or by track walking. Track walking should only be used where other methods are impractical because track walking with heavy equipment typically compacts the soil.

A variety of mulches can be used effectively at construction sites. Consider the following:

Mulch	
Functions	
Erosion Control	Yes
Sediment Control	Moderate
Site/Material Management	No

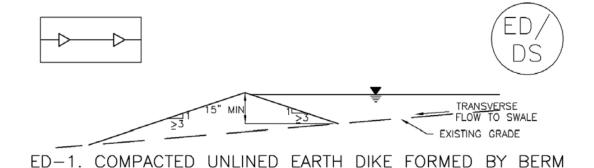
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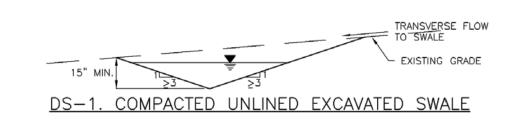
Earth Dikes and Drainage Swales (ED/DS)

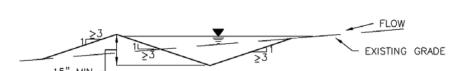
EC-10

ED/DS-3

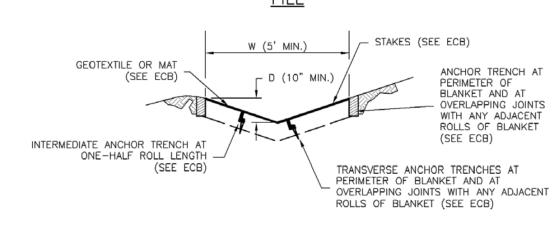
MM-2







DS-2. COMPACTED UNLINED SWALE FORMED BY CUT AND



DS-3. ECB LINED SWALE (CUT AND FILL OR BERM)

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Stockpile Management (SP)

CALLED FOR IN THE PLANS

EARTH DIKE AND DRAINAGE SWALE INSTALLATION NOTES

30 MIL MIN.

INTERMEDIATE ANCHOR

THICKNESS=2 X D50 ¬ ∟

TRENCH AT ONE-HALF ROLL LENGTH SIMILAR TO ECB, BUT NO STAKING

- SEE SITE PLAN FOR:
 LOCATION OF DIVERSION SWALE - TYPE OF SWALE (UNLINED, COMPACTED AND/OR LINED).
- DEPTH, D. AND WIDTH, W DIMENSIONS
- FOR ECB/TRM LINED DITCH, SEE ECB DETAIL, FOR RIPRAP LINED DITCH, SIZE OF RIPRAP, D50.
- 2. SEE DRAINAGE PLANS FOR DETAILS OF PERMANENT CONVEYANCE FACILITIES AND/OR DIVERSION SWALES EXCEEDING 2-YEAR FLOW RATE OR 10 CFS. 3. EARTH DIKES AND SWALES INDICATED ON SWMP PLAN SHALL BE INSTALLED PRIOR TO LAND-DISTURBING ACTIVITIES IN PROXIMITY.

DS-4. SYNTHETIC LINED SWALE

DS-5. RIPRAP LINED SWALE

Earth Dikes and Drainage Swales (ED/DS)

ANCHOR TRENCH AT PERIMETER

OF BLANKET AND AT OVERLAPPING JOINTS WITH ANY

ADJACENT ROLLS OF BLANKET,

SIMILAR TO ECB, BUT NO

LINE WITH AASHTO #3 ROCK (CDOT SECT.

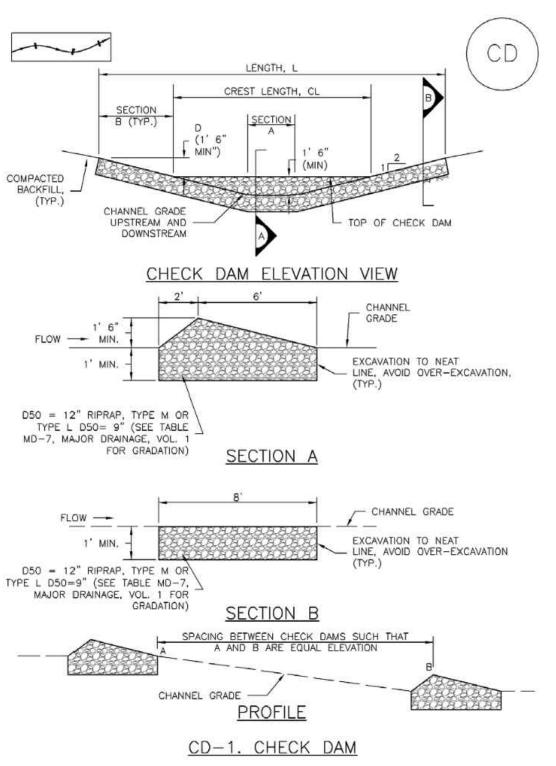
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TRANSVERSE ANCHOR TRENCHES AT PERIMETER OF BLANKET AND AT OVERLAPPING JOINTS WITH ANY ADJACENT ROLLS OF BLANKET, SIMILAR TO ECB, BUT

- 4. EMBANKMENT IS TO BE COMPACTED TO 90% OF MAXIMUM DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D698.
- 5. SWALES ARE TO DRAIN TO A SEDIMENT CONTROL BMP.
- 6. FOR LINED DITCHES, INSTALLATION OF ECB/TRM SHALL CONFORM TO THE REQUIREMENTS
- 7. WHEN CONSTRUCTION TRAFFIC MUST CROSS A DIVERSION SWALE, INSTALL A TEMPORARY CULVERT WITH A MINIMUM DIAMETER OF 12 INCHES.

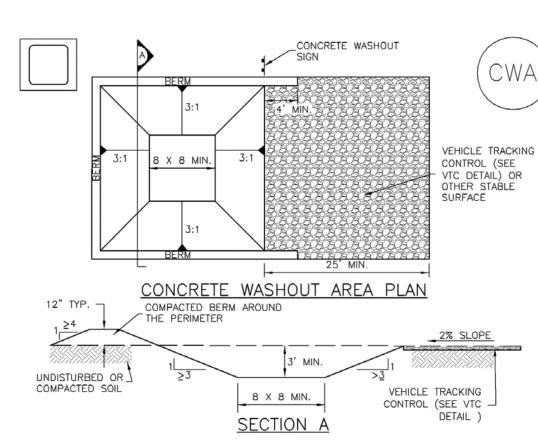
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EC-12 Check Dams (CD)



Concrete Washout Area (CWA)

MM-1



CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR: -CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY, DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'. 6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

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CWA-3

STOCKPILE SILT FENCE (SEE SF DETAIL FOR INSTALLATION REQUIREMENTS) STOCKPILE PROTECTION PLAN SILT FENCE (SEE SF DETAIL FOR INSTALLATION REQUIREMENTS) SECTION A SP-1. STOCKPILE PROTECTION STOCKPILE PROTECTION INSTALLATION NOTES 1. SEE PLAN VIEW FOR: -LOCATION OF STOCKPILES. -TYPE OF STOCKPILE PROTECTION. 2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS. 3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS). 4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE

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GRADING & EROSION CONTROL PLAN DETAILS

SHEET

Implement construction site good housekeeping practices to prevent pollution associated with solid, liquid and hazardous

Management Plans (SWMPs) should clearly specify BMPs

construction-related materials and wastes. Stormwater

including these good housekeeping practices:

Designate paint and concrete washout areas.

Establish proper building material staging areas.

Establish proper equipment/vehicle fueling and

Develop a spill prevention and response plan.

Control equipment/vehicle washing and allowable non-

Acknowledgement: This Fact Sheet is based directly on

Good housekeeping practices are necessary at all construction sites.

The following principles and actions should be addressed in SWMPs:

Designate trash and bulk waste-collection areas on-

Provide for Waste Management. Implement management procedures and practices to prevent or

reduce the exposure and transport of pollutants in stormwater from solid, liquid and sanitary wastes

and cleanup measures can reduce the potential for stormwater runoff to pick up construction site

that will be generated at the site. Practices such as trash disposal, recycling, proper material handling,

wastes and discharge them to surface waters. Implement a comprehensive set of waste-management

practices for hazardous or toxic materials, such as paints, solvents, petroleum products, pesticides,

wood preservatives, acids, roofing tar, and other materials. Practices should include storage,

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handling, inventory, and cleanup procedures, in case of spills. Specific practices that should be

EPA guidance provided in Developing Your Stormwater

Provide for waste management.

maintenance practices.

stormwater discharges.

Pollution Prevent Plan (EPA 2007).

Design and Installation

Appropriate Uses

considered include:

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Solid or Construction Waste

Description

Clean up litter and debris from the construction site daily.

Empty waste containers before they are full and overflowing.

Sanitary and Septic Waste

- Provide convenient, well-maintained, and properly located toilet facilities on-site.
- Locate toilet facilities away from storm drain inlets and waterways to prevent accidental spills and contamination of stormwater.
- Maintain clean restroom facilities and empty portable toilets regularly.
- Where possible, provide secondary containment pans under portable toilets.
- Provide tie-downs or stake-downs for portable toilets.
- Educate employees, subcontractors, and suppliers on locations of facilities.
- Treat or dispose of sanitary and septic waste in accordance with state or local regulations. Do not discharge or bury wastewater at the construction site.
- Inspect facilities for leaks. If found, repair or replace immediately.
- Special care is necessary during maintenance (pump out) to ensure that waste and/or biocide are not spilled on the ground.

Hazardous Materials and Wastes

- Develop and implement employee and subcontractor education, as needed, on hazardous and toxic waste handling, storage, disposal, and cleanup.
- Designate hazardous waste-collection areas on-site.
- Place all hazardous and toxic material wastes in secondary containment.

GH-2

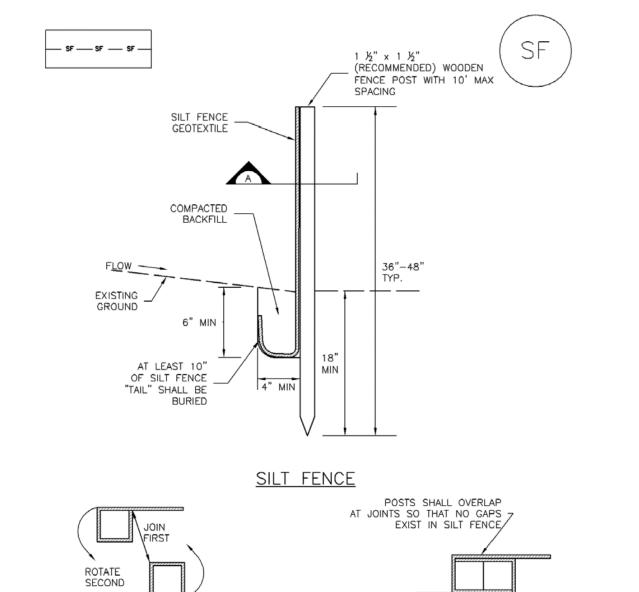


Photograph GH-3. Locate portable toilet facilities on level surfaces away from waterways and storm drains. Photo courtesy of WWE.

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Silt Fence (SF) SC-1



SECTION A

THICKNESS OF GEOTEXTILE HAS

SF-1. SILT FENCE

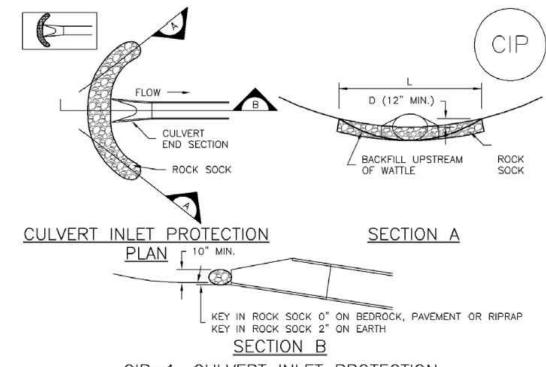
POSTS SHALL BE JOINED AS

SHOWN, THEN ROTATED 180 DEG.

IN DIRECTION SHOWN AND DRIVEN

Urban Drainage and Flood Control District November 2010 Urban Storm Drainage Criteria Manual Volume 3 **Inlet Protection (IP)**

SC-6



CIP-1. CULVERT INLET PROTECTION CULVERT INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR -LOCATION OF CULVERT INLET PROTECTION.

2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING DETAIL.

CULVERT INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS 1/2 THE HEIGHT OF THE ROCK SOCK.

5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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Sediment Basin (SB)

SC-7

Yes

MM-3

Photographs GH-1 and GH-2. Proper materials

storage and secondary containment for fuel tanks

courtesy of CDOT and City of Aurora.

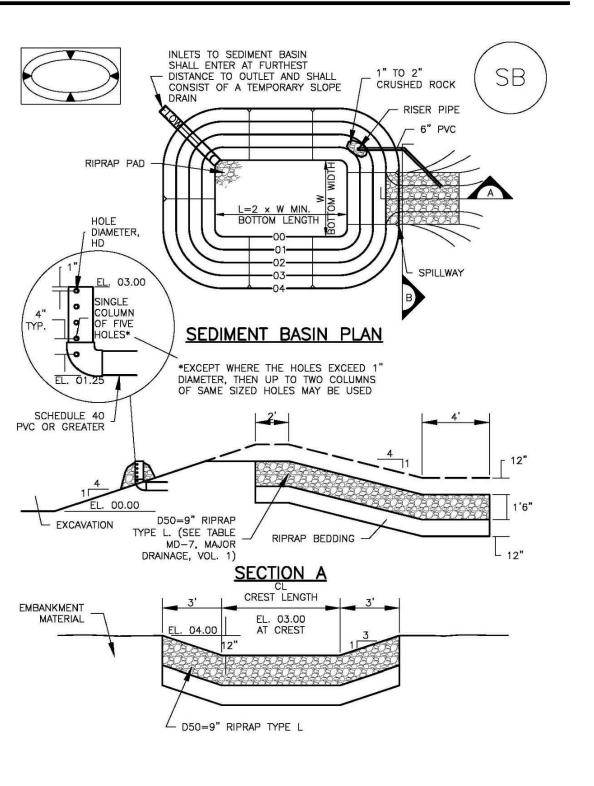
are important good housekeeping practices. Photos

Good Housekeeping

Erosion Control

Sediment Control

Site/Material Managemen



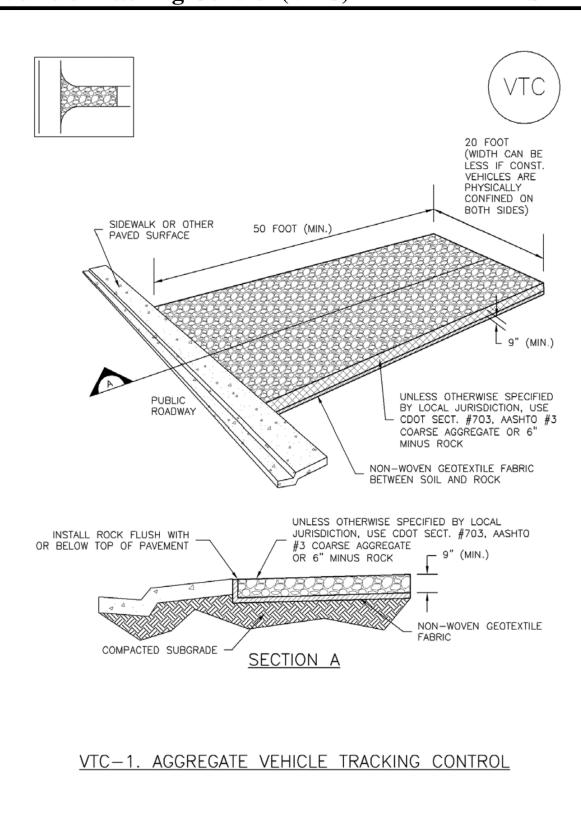
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Vehicle Tracking Control (VTC)

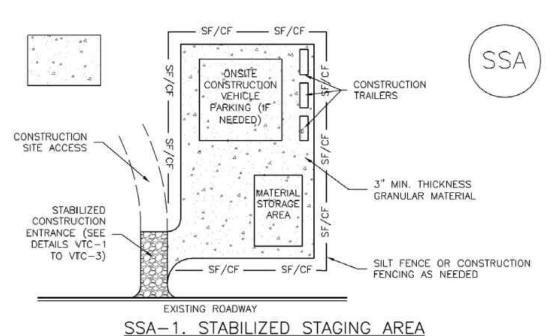
SM-4

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Stabilized Staging Area (SSA)

SM-6



STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR

-LOCATION OF STAGING AREA(S). -CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL

OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION. 3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE. 4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK. 6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT

FENCE AND CONSTRUCTION FENCING. STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

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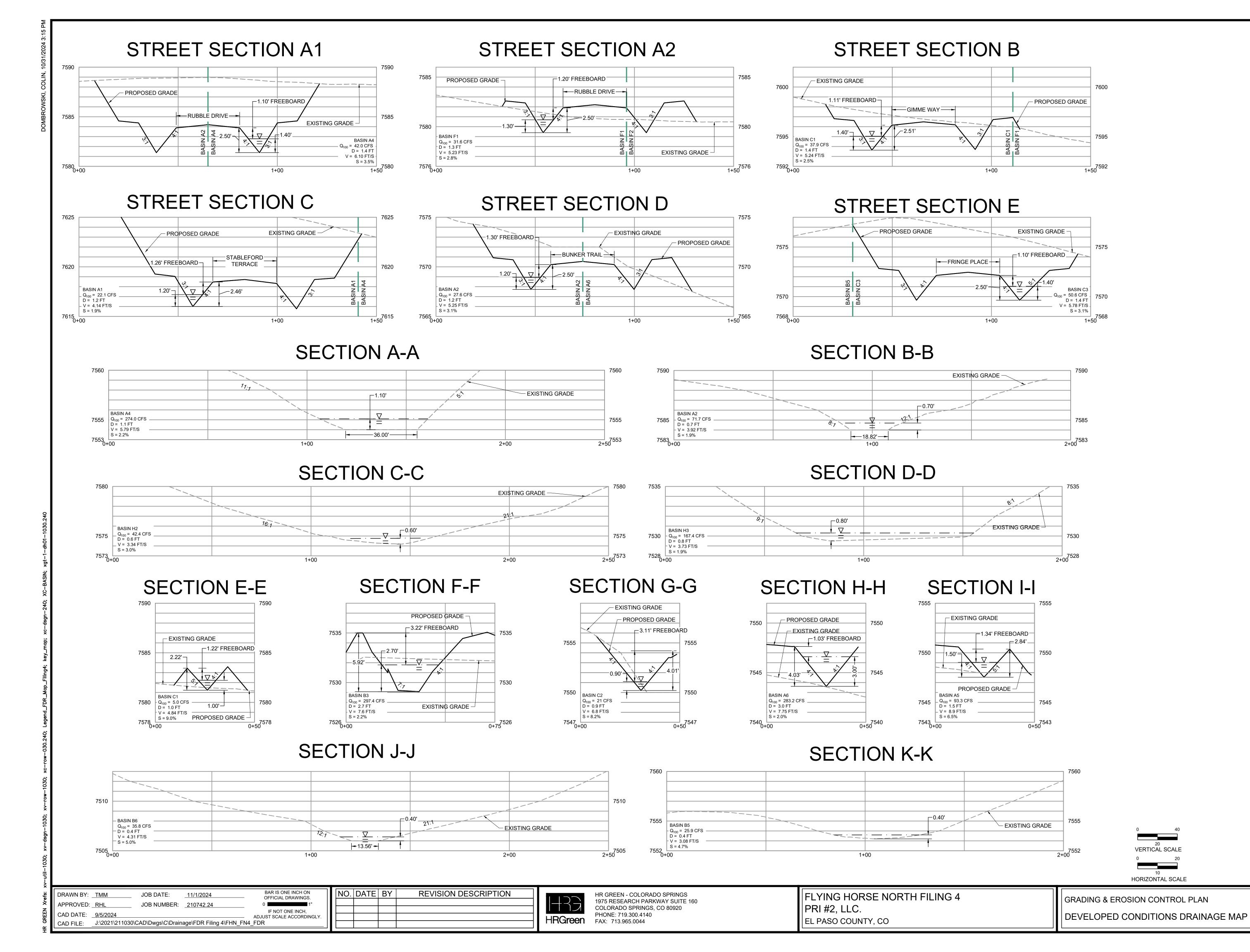
VTC-3

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GRADING & EROSION CONTROL PLAN DETAILS

SHEET

PCD FILE NO.: SF24



SHEET